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PROCEEDINGS  
OF THE  
CALIFORNIA ACADEMY OF SCIENCES  
FOURTH SERIES

Vol. XXXI, No. 20, pp. 559-562, 7 figs.

January 15, 1965

PHYLLOPHAGA SAYLORI, N. SP.,  
FROM NUEVO LEON, MEXICO  
(COLEOPTERA: SCARABAEIDAE)

By

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Jean Mathieu, Instituto Tecnológico y de Estudios Superiores in Monterrey, Nuevo Leon, Mexico, made a special search for *Phyllophaga galeana* Saylor (1943: 28) on May 12 and 13, 1961, at its type locality, Galeana, Nuevo Leon. He examined various plants, including *Pinus* and *Juniperus*, suspected as possible hosts, but without success. Mr. Mathieu slept under the pines that night, and early next morning he noted a large species of *Phyllophaga* dropping from the high pine foliage to the forest floor. It is a new species in the "ignava" group, as defined by Sanderson (1958: 160, 172), and it is unique in several features among some 30 known species in that group.

This species is named in honor of Mr. L. W. Saylor, Head of the Material Department, Administrative Branch, Naval Supply Depot, Oakland, California. From 1934 to 1948, Mr. Saylor published some 35 papers on New World *Phyllophaga* in which he described many new species. He is especially to be credited, however, with breaking the taxonomic impasse which existed in the Central American and Mexican literature since the

publication of the *Biologia* portion treating this genus. Until he began his studies for that area, it was virtually impossible to identify species from the literature. He illustrated male genitalia and prepared keys to several groups of species, making it possible to recognize a large proportion of the species in Mexico and Central America. The Saylor collection of *Phyllophaga* and other Scarabaeidae is now located at the California Academy of Sciences.

I am indebted to Jean Mathieu for the specific determination of the pine.

***Phyllophaga saylori* Sanderson, new species.**

(Figures 1-7.)

**HOLOTYPE.** Male. Illinois Natural History Survey, collected 4 km. south of Galeana in Nuevo Leon, Mexico, at 6000 feet, May 13, 1961, by Jean Mathieu. Dropped from *Pinus teocote* about 5 o'clock in the morning. *General appearance.* A large plump brownish beetle, the posterior margin of the elytra (fig. 7) reflexed. *Length* 24 mm.; width 12.5 mm. *Head.* Antenna 10-segmented, 3-segmented club short, approximately equal in length to five preceding segments combined, and approximately equal in length to clypeus at middle. Clypeus evenly rounded to the slightly emarginate apex, apical margin strongly reflexed in anterior one-third, clypeal punctures shallow, generally closely placed, separated on the average by less than their own widths; frons similarly punctured but with irregular impunctate areas, especially adjacent to clypeo-frontal suture. Labrum exposed when viewed from above. Pronotum 1.6 times as wide as long, finely and very irregularly punctured, some punctures separated from others by from one to six times their widths; lateral margins broadly and faintly erenulate, nearly parallel in basal one-half; basal angle distinct, approximately 135 degrees, anterior angle not produced. *Elytra* rather strongly flared posteriorly, widest at about apical one-third, sutural costa very broad at middle, narrowed toward apex and scutellum, with irregularly scattered punctures; a large diagonal nearly impunctate costa arising near middle of base of elytron, expanded and extended toward sutural apex; apical margin of each elytron (fig. 7) strongly reflexed; entire lateral margin of elytron, except near sutural apex, with a conspicuous fringe of long hairs. *Abdomen.* Pygidium nearly evenly convex for most of its length, more strongly convex before apex, very irregularly and shallowly punctured, glabrous. Abdomen in lateral view (fig. 7) strongly convex to the narrowly transversely impressed posterior margin of the penultimate sternite; surface shining, nearly impunctate on disc, punctures dense in a median patch on posterior one-half of penultimate sternite; three abdominal sutures on disc slightly produced anteriorly at middle; last sternite flattened, about one-half length of penultimate. *Mesosternum.* Densely punctured toward sides, more sparsely

punctured at middle, with long hairs not quite as long as greatest width of middle femur. *Legs.* Anterior tibia tridentate; each anterior tarsal segment with a ventral longitudinal carina, carinae of first four segments each terminating in a strong internal tooth; each tarsal claw with a long nearly median tooth (fig. 6); apical margin of posterior tibiae each with 22 and 24 strong setae; apical tibial spurs slender, longer spur a little longer than first posterior tarsal segment; posterior tibia without special modifications. *Genitalia* (figs. 1-3) asymmetrical, apical lobe of each paramere free, slender; one of the two lobes of paramere base (fig. 3) more expanded at apex than the other; aedeagus (fig. 2) bearing two strongly curved processes one on one side, one longer than the other.

*PARATYPES.* Eleven males and two females, all collected at the type locality, and except three males collected at light, under the same conditions. California Academy of Sciences; Instituto Tecnológico y de Estudios

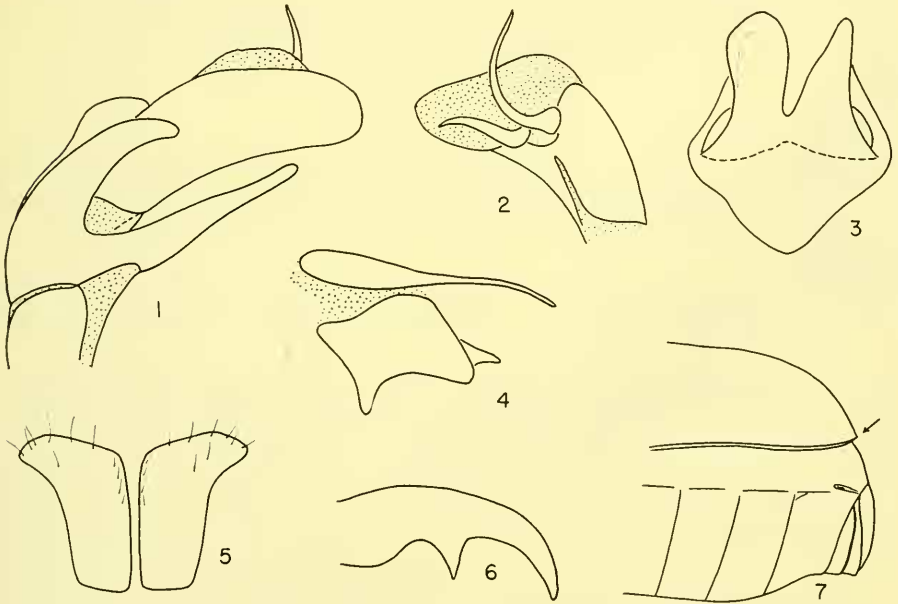


FIGURE 1. Left lateral view of male genitalia, *Phyllophaga saylora*.

FIGURE 2. Right lateral view of aedeagus of male genitalia, *Phyllophaga saylora*.

FIGURE 3. Dorsal view of asymmetrical base of parameres of male genitalia, *Phyllophaga saylora*.

FIGURE 4. Anal plates of female, *Phyllophaga saylora*.

FIGURE 5. Pubic processes of female genitalia, *Phyllophaga saylora*.

FIGURE 6. Tarsal claw of right foreleg of male, *Phyllophaga saylora*.

FIGURE 7. Lateral view of elytron and abdomen of male, *Phyllophaga saylora*. Arrow indicates reflexed elytral margin.

Superiores in Monterrey, Nuevo Leon; Illinois Natural History Survey. Males vary in color from light brown to dark brownish red; length 21 to 25 mm.; width 11 to 12.4 mm. The pronotum ranges from 1.67 to 1.90 times as wide as long, and the posterior tibial setae from 17 to 24. The female is similar to the male except as follows: antennal club shorter than clypeal length; pygidium deeply, narrowly grooved at apex; abdomen more pointed, last sternite longer, about two-thirds length of penultimate sternite. Pubic process of female genitalia divided (fig. 5); anal plates as in figure 4.

DISCUSSION. The genitalia of one dissected male are paler in color and less heavily sclerotized than other males, suggesting recent transformation from the pupal stage. The reflexed apical elytral margin, and the asymmetrical male genitalia will distinguish this species from all other known members of the "*ignava*" group. In size and appearance, *P. saylora* resembles *P. torta* LeConte (Mexico, United States), and *P. pleroma* Reinhard (Texas), both belonging to the "*ignava*" group. The symmetrical male genitalia will at once distinguish the two species from *P. saylora*.

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